

Fig. 1

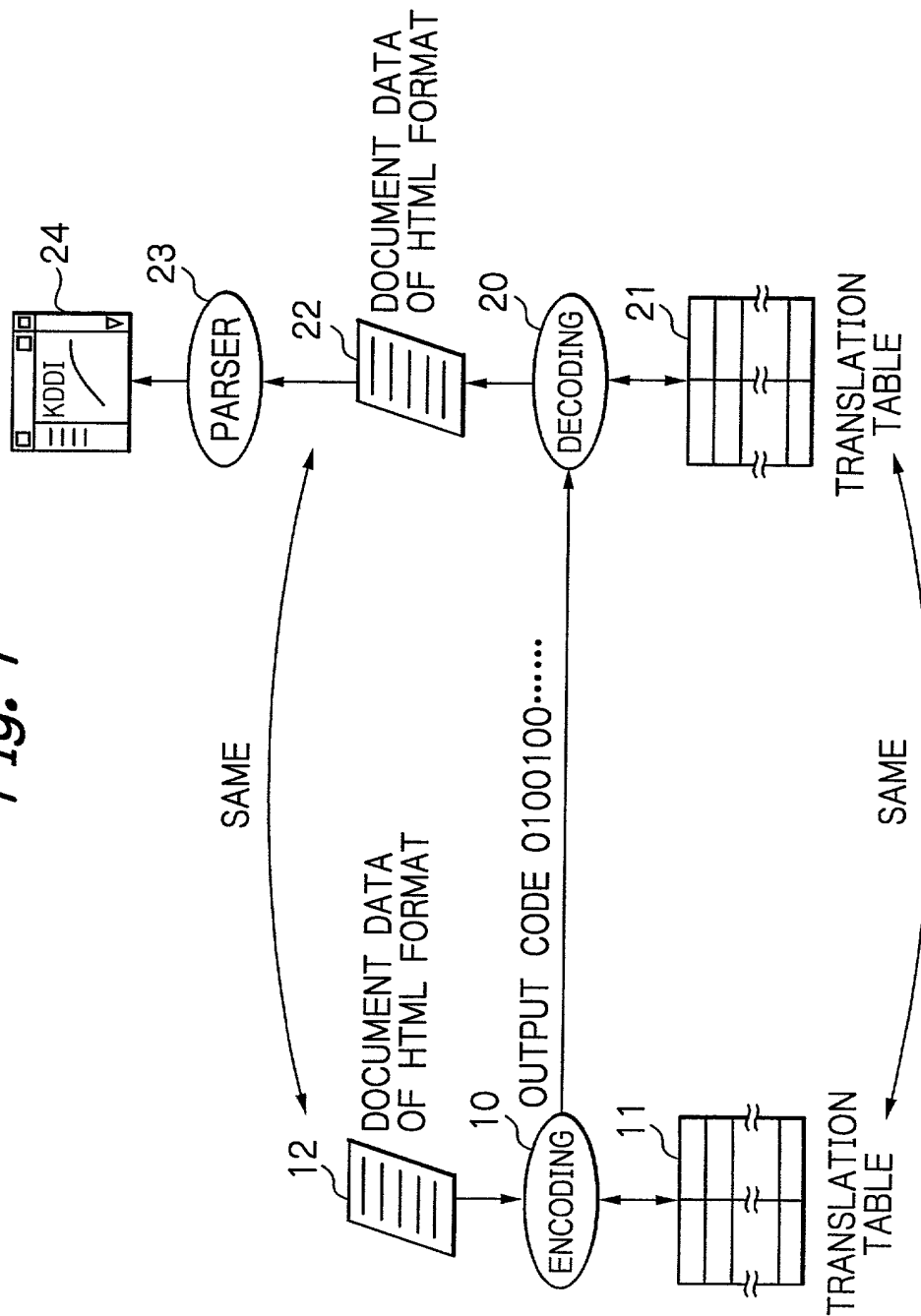


Fig. 2

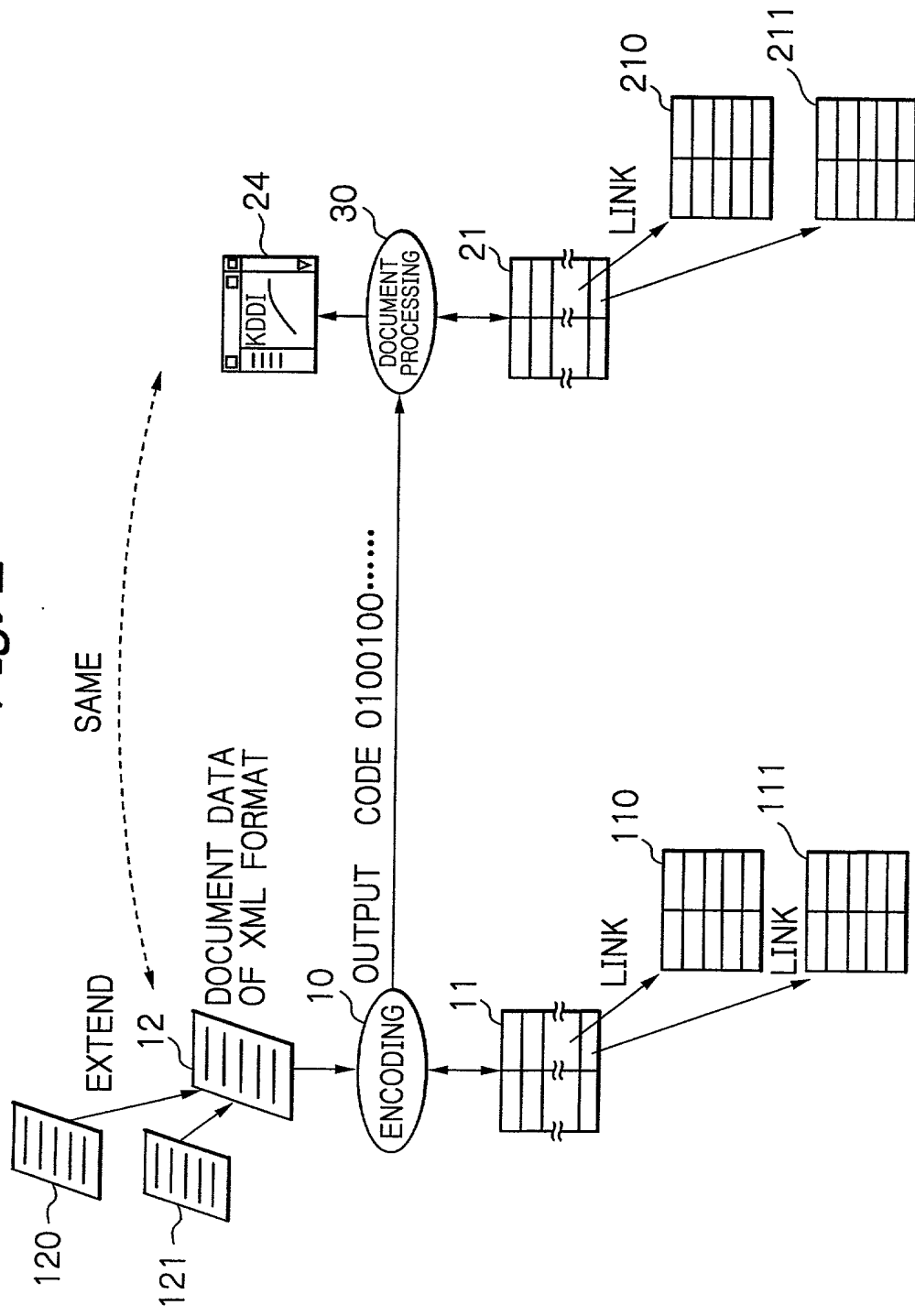


Fig. 3

[SAMPLE OF DOCUMENT DATA]

<svg width="500" height="800"> [1]

<rect x="0" y="0" width="10" height="100" /> [2]

<text x="480" y="300">文字列1=</text> [3]

</svg> [4]

Fig. 4

[SAMPLE OF CODE DATA]

00 000	NAME "00"+START OF ELEMENT"svg" "000" [1]
00 10	NAME "00"+ATTRIBUTE NAME width "10"
01 0111110100	NUMERIC "01"+ATTRIBUTE VALUE 500
00 11	NAME "0"+ATTRIBUTE NAME height "11"
01 1100100000	NUMERIC "01"+ATTRIBUTE VALUE 500
00 001	NAME "00"+START OF ELEMENT"rect" [2]
00 100	NAME "00"+ATTRIBUTE NAME x "100"
01 0000000000	NUMERIC "01"+ATTRIBUTE VALUE 0
00 101	NAME "00"+ATTRIBUTE NAME y "101"
01 0000000000	NUMERIC "01"+ATTRIBUTE VALUE 0
00 110	NAME "00"+ATTRIBUTE NAME width "110"
01 0000001010	NUMERIC "01"+ATTRIBUTE VALUE 10
00 111	NAME "00"+ATTRIBUTE NAME height "111"
01 0001100100	NUMERIC "01"+ATTRIBUTE VALUE 100
00 011	NAME "00"+END OF ELEMENT"rect" "011"
00 010	NAME "00"+START OF ELEMENT"text" "010" [3]
00 10	NAME "00"+ATTRIBUTE NAME x "10"
01 0111100000	NUMERIC "01"+ATTRIBUTE VALUE 480
00 11	NAME "00"+ATTRIBUTE NAME y "11"
01 0100101100	NUMERIC "01"+ATTRIBUTE VALUE 300
10 00000100	CHARACTER STRING "10"+NUMBER OF CHARACTER 4
1001010110110110	CHARACTER 「文」
1000111010011010	CHARACTER 「字」
1001011111110001	CHARACTER 「列」
1000001001010000	CHARACTER 「1」
00 011	NAME "00"+END OF ELEMENT"text" "011"
00 011	NAME "00"+END OF ELEMENT"svg" "011" [4]

Fig. 5a

[SAMPLE OF TRANSLATION TABLE]

<?xml version="1.0"?>

<xex version="1.0">

<head> ((1) START OF HEADER PART)

<prefix bit="2"> ((2) CODE LENGTH)

<name_prefix code="00" /> ((3) CODE THAT MEANS NAME)

<number_prefix code="01" /> ((4) CODE THAT MEANS NAMERIC)

<char_prefix code="10" /> ((5) CODE THAT MEANS CHARACTER
STRING)

</prefix>

<root name="svg" bit="3" code="000" />
((6) 3 BITS "000" ARE ASSIGNED TO
START OF ELEMENT "svg")

<end name="/svg" bit="3" code="011" />
((7) 3 BITS "011" ARE ASSIGNED TO
END OF ELEMENT "svg")

</head>

Fig. 5b

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<body>                                ((8) START OF BODY PART)
<element name="svg">                  ((9) ELEMENT NAME "svg" IS DEFINED)
  <attlist bit="2">                    ((10) 2BITS ARE ASSIGNED AS ATTRIBUTE
                                     NAME)
    <attr name="width" code="10">
      ((11) "10" IS ASSIGNED TO ATTRIBUTE NAME "width"
      BASED ON ELEMENT NAME "svg")
    <value>
      <number bit="10" data="UI" qt="1" />
      ((12) ATTRIBUTE VALUE OF ATTRIBUTE NAME "width" IS
      REPRESENTED BY 10 BITS OF UNSIGNED INTEGER)
    </value>
  </attr>
  <attr name="height" code="11">
    ((13) "11" IS ASSIGNED TO ATTRIBUTE NAME "height"
    BASED ON ELEMENT NAME "svg")
  </value>
  <number bit="10" data="UI" qt="1" />
  ((14) ATTRIBUTE VALUE OF ATTRIBUTE NAME "height" IS
  REPRESENTED BY 10 BITS OF UNSIGNED INTEGER)
  </value>
</attr>
</attlist>
<children bit="3"> ((15) CHILD ELEMENT IS DEFINED BY 3 BITS)
  <child_element name="rect" code="001" end-code="011" />
  ((16) ELEMENT NAME "rect" THAT IS A CHILD OF ELEMENT
  "svg" IS DEFINES)
  ((17) "001" IS ASSIGNED TO START OF ELEMENT "rect"
  "011" IS ASSIGNED TO END OF ELEMENT "rect")
  <child_element name="text" code="010" end-code="011" />
  ((18) ELEMENT NAME "text" THAT IS A CHILD OF ELEMENT
  "svg" IS DEFINES)
  ((19) "010" IS ASSIGNED TO START OF ELEMENT "text"
  "011" IS ASSIGNED TO END OF ELEMENT "text")
</children>
</element>

```

Fig. 5c

<element name="rect"> ((20) ELEMENT NAME "rect" IS DEFINED)
<attlist bit="3"> ((21) 3BITS ARE ASSIGNED AS ATTRIBUTE NAME)
 <attr name="x" code="100">
 ((22) "100" IS ASSIGNED TO ATTRIBUTE NAME)
 <value>
 <number bit="10" data="I" qt="implied" />
 ((23) ATTRIBUTE VALUE OF ATTRIBUTE NAME "x" IS REPRESENTED BY 10 BITS OF SIGNED INTEGER)
 <value>
 </attr>
 <attr name="y" code="101">
 ((24) "101" IS ASSIGNED TO ATTRIBUTE NAME "y")
 <value>
 <number bit="10" data="I" qt="implied" />
 ((25) ATTRIBUTE VALUE OF ATTRIBUTE NAME "y" IS REPRESENTED BY 10 BITS OF SIGNED INTEGER)
 </value>
 </attr>
 <attr name="width" code="110">
 ((26) "110" IS ASSIGNED TO ATTRIBUTE NAME "width")
 </value>
 <number bit="10" data="UI" qt="implied" />
 ((27) ATTRIBUTE VALUE OF ATTRIBUTE NAME "width" IS REPRESENTED BY 10 BITS OF UNSIGNED INTEGER)
 </value>
 </attr>
 <attr name="height" code="111">
 ((28) "111" IS ASSIGNED TO ATTRIBUTE NAME "height")
 <value>
 <number bit="10" data="UI" qt="implied" />
 ((29) ATTRIBUTE VALUE OF ATTRIBUTE NAME "height" IS REPRESENTED BY 10 BITS OF UNSIGNED INTEGER)
 </value>
 </attr>
</attlist>
</element>

Fig. 5d

<element name="text"> ((30) ELEMENT NAME "text" IS DEFINED)
<attlist bit="2"> ((31) 2 BITS ARE ASSIGNED TO ATTRIBUTE
NAME)
<attr name="x" code="10">
((32) "10" IS ASSIGNED TO ATTRIBUTE NAME "x")
<value>
<number bit="10" data="I" qt="implied" />
((33) ATTRIBUTE VALUE OF ATTRIBUTE NAME "x" IS
REPRESENTED BY 10 BITS OF SIGNED INTEGER)
</value>
</attr>
<attr name="y" code="11">
((34) "11" IS ASSIGNED TO ATTRIBUTE NAME "x")
</value>
<number bit="10" data="I" qt="implied" />
((35) ATTRIBUTE VALUE OF ATTRIBUTE NAME "y" IS
REPRESENTED BY 10 BITS OF SIGNED INTEGER)
</value>
</attr>
</attlist>
<element_value>
((36) ELEMENT VALUE OF ELEMENT "text" IS DEFINED)
<char_length="implied" encoding="Shift_JIS" qt="I" />
((37) IT IS DEFINED THATS VALUE IS SHIFT_JIS
FORMAT)
</element_value>
</element>
</body>
</xeus>

Fig. 6

DOCUMENT A

```
<a1>
  <a2>aaa</a2>
</a1>
```

DOCUMENT B

```
<b1>bbb</b1>
```

EXTENDING OF DOCUMENT A AND DOCUMENT B

```
<a:a1 xmlns:a="#a" xmlns:b="#b" >
  <b:b1>bbb</b:b1>
  <a:a2>aaa</a:a2>
</a:a1>
```

TRANSLATION TABLE

```
<?xml version="1.0"?>
<xeus xmlns="xeus-for-a&b" >
<head>
  <namespaces>
    <namespace bit="1" name="a1" prefix="a" code="0"
                                     xlink:href="a.xeus"/>
    <namespace bit="1" name="a1" prefix="b" code="1"
                                     xlink:href="b.xeus"/>
  </namespaces>
</head>
</xeus>
```

Fig. 7

[SAMPLE OF CODE DATA]

```

00 0000000100010010 000 NAME "00"+OCCUPATION 274bits + START OF ELEMENT
      "svg" "000" [1]

00 10      NAME "00"+ATTRIBUTE NAME width "10"
01 0111110100      NUMERIC "01"+ATTRIBUTE VALUE 500
00 11      NAME "00"+ATTRIBUTE NAME height "11"
01 1100100000      NUMERIC "01"+ATTRIBUTE VALUE 500
00 0000000001001100 001 NAME "00"+OCCUPATION 76bits + START OF ELEMENT
      "rect" [2]

00 100      NAME "00"+ATTRIBUTE NAME x "100"
01 0000000000      NUMERIC "01"+ATTRIBUTE VALUE 0
00 101      NAME "00"+ATTRIBUTE NAME y "101"
01 0000000000      NUMERIC "01"+ATTRIBUTE VALUE 0
00 110      NAME "00"+ATTRIBUTE NAME width "110"
01 0000001010      NUMERIC "01"+ATTRIBUTE VALUE 10
00 111      NAME "01"+ATTRIBUTE NAME height "111"
01 0001100100      NUMERIC "01"+ATTRIBUTE VALUE 100
00 011      NAME "00"+END OF ELEMENT"rect" "011"
00 0000000001110010 010 NAME "00"+OCCUPATION 14 bits + START OF ELEMENT
      "text" "010" [3]

00 10      NAME "00"+ATTRIBUTE NAME x "10"
01 0111100000      NUMERIC "01"+ATTRIBUTE VALUE 480
00 11      NAME "00"+ATTRIBUTE NAME y "11"
01 0100101100      NUMERIC "01"+ATTRIBUTE VALUE 300
10 00000100      CHARACTER STRING "10"+NUMBER OF CHARACTER 4
1001010110110110      CHARACTER 「文」
1000111010011010      CHARACTER 「字」
1001011111110001      CHARACTER 「列」
1000001001010000      CHARACTER 「1」
00 011      NAME "00"+END OF ELEMENT"text" "011"
00 011      NAME "00"+END OF ELEMENT"svg" "011" [4]
00 011

```

Fig. 8

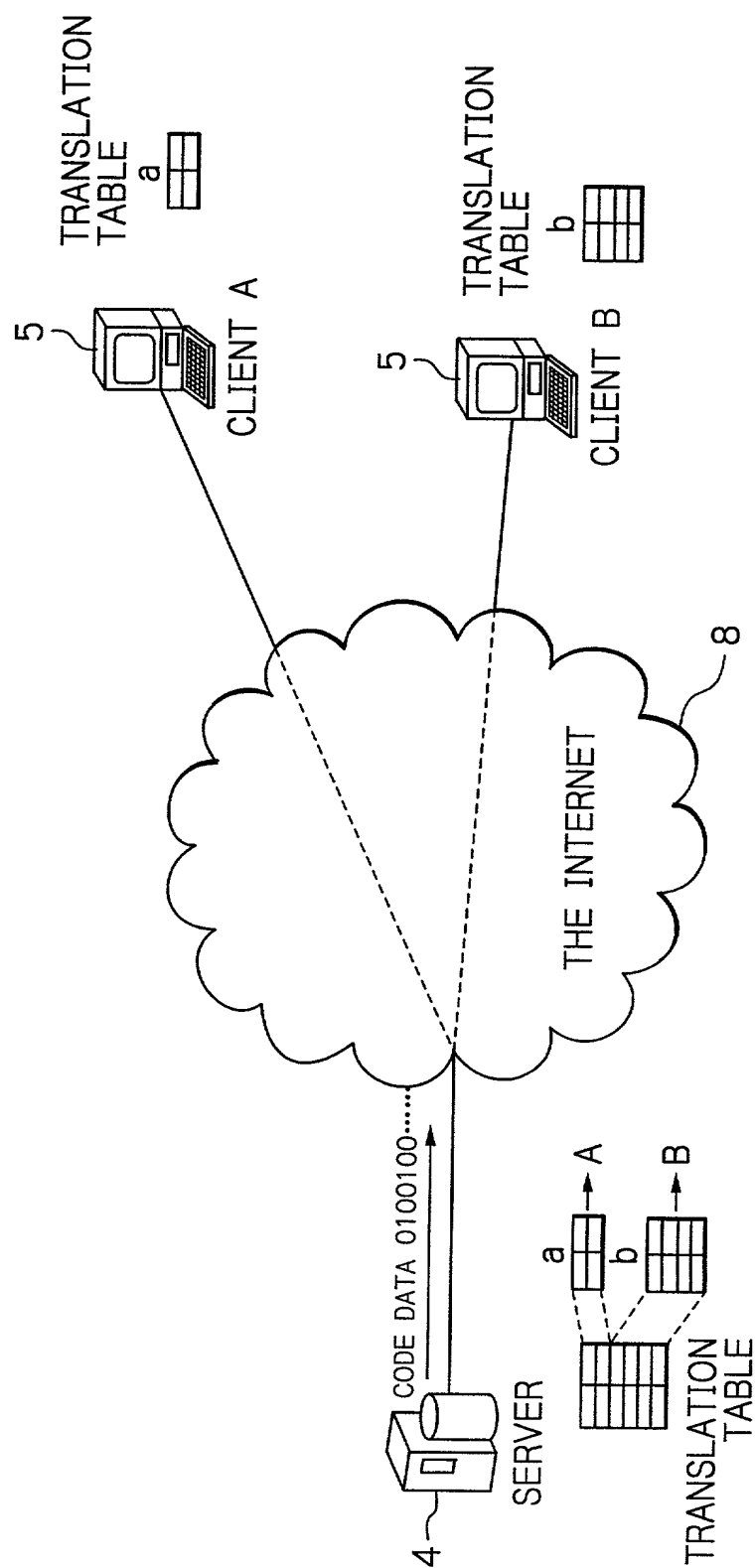


Fig. 9

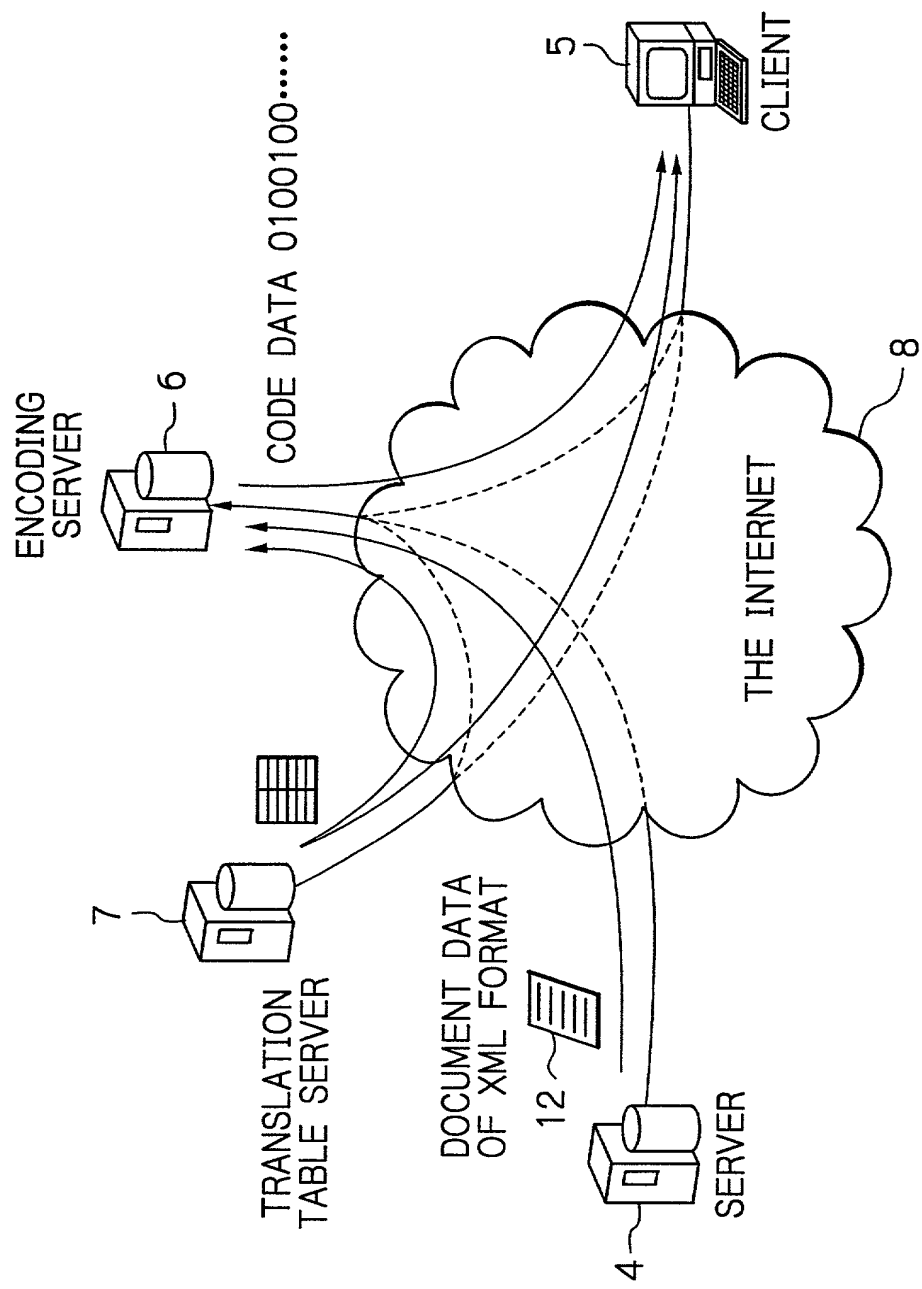


Fig. 10

